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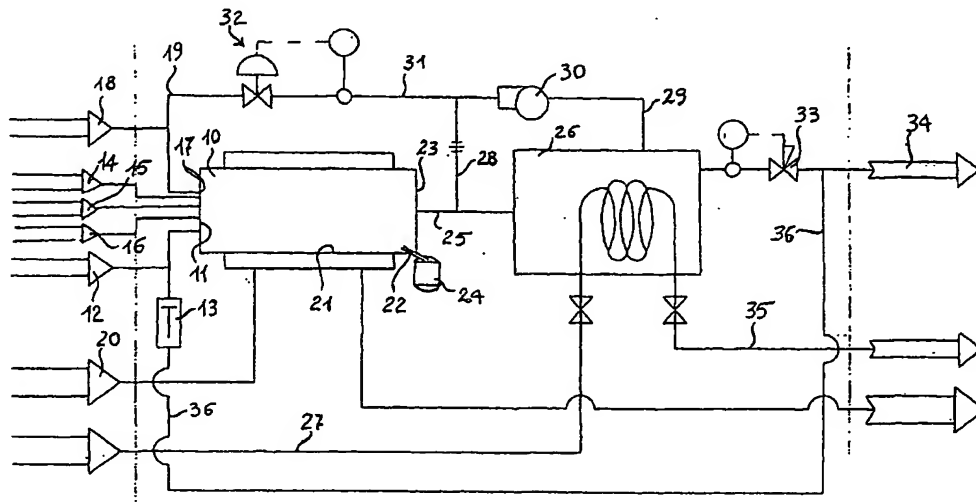
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- (54) Title: METHOD AND PLANT FOR THE TREATMENT OF MATERIALS, IN PARTICULAR WASTE MATERIALS AND REFUSE**



- (57) Abstract:** A plant for the treatment of materials, in particular waste materials and refuse, comprises a combustion reactor (10) to which the material to be treated can be supplied. The combustion reactor has an input (17) for a combustion supporter comprising oxygen and an output (34) for the gases that are produced during the combustion of the material inside the reactor (10) and, in use, is substantially isothermic or quasi-isothermic at high or very high temperature, and without substantial oxygen deficit, in all of its parts. A portion of the combustion gases is recirculated and mixed with the combustion supporter to bring about a high degree of opacification thereof, which is increased by increasing the total pressure of the combustion chamber. The substances which cannot be gasified inside the reactor are immediately fused. The parameters of the gases at the output from the reactor are constantly measured by sensors with response-time characteristics of about 2 seconds.

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